PATENT
PDNO 10018297-1

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

**RECEIVED**
**CENTRAL FAX CENTER**

**OCT 1 1 2005**

In re Application of:
  Amir Said
Serial No. 09/924,926
Filed: August 8, 2001

Confirmation No. 3679

Examiner: F. Ferris
Group Art Unit: 2128

For: PREDOMINANT COLOR IDENTIFICATION IN DIGITAL IMAGES

Mail stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA  22313-1450

### PRE-APPEAL BRIEF REQUEST FOR REVIEW

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed.
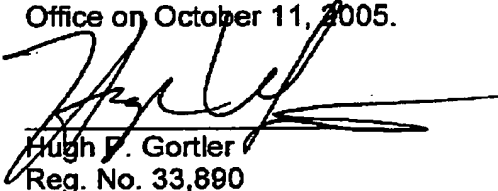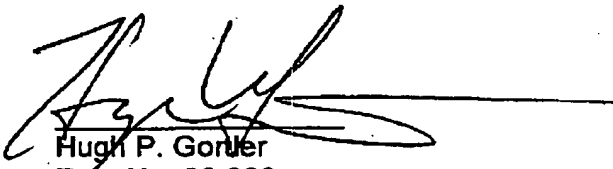
This request is being filed with a notice of appeal.

The review is requested for the reasons stated in the attached sheets.

Respectfully submitted,

Fax No. 1-571-273-8300
Pages: 5

Hugh P. Gortler
Reg. No. 33,890

I hereby certify that this correspondence
is being facsimile transmitted to the
United States Patent and Trademark
Office on October 11, 2005.

Hugh P. Gortler
Reg. No. 33,890

Hewlett-Packard Company
Intellectual Property Administration
P.O. Box 272400
Fort Collins, Colorado  80527-2400

(949) 454-0898

Date: October 11, 2005

S.N. 09/924,926

## ARGUMENTS

Claims 1-23 are pending.

Claims 4-5 and 16-17 are objected to.

The final office action dated July 12, 2005 indicates that claims 1-3, 6-15 and 18-23 are rejected under 35 USC §103 as being unpatentable over Henderson U.S. Patent No. 6,011,595 in view of Golin U.S. Patent No. 5,079,630.

Claim 1 recites a method of identifying at least one predominant color in a digital image. The method comprises applying a detection rule to randomly-selected pixels in the image. The rule includes testing specific colors among the randomly selected pixels to reduce the probability of at least one of a false-positive outcome and a false-negative outcome.

### The final office action contains clear factual error because Henderson and Golin do not teach any of the limitations of claim 1

Henderson discloses a method of segmenting a foreground object from a non-descript background in a digital image (e.g., segmenting a person from a backdrop such as a blue screen). Henderson's method includes measuring the color of the background, and determining a key color range based on the measured background color (col. 5, line 10 to col. 8, line 31; and column 9, lines 6-49). The key color range is used to identify colors that are considered part of the background (and not the foreground). All colors in the key color range are assumed to be part of the background.

a. **Henderson does not teach or suggest identifying a predominant color in an image.** Henderson does not teach or suggest a method for identifying a predominant color in a foreground object. As for the background, Henderson provides a table for indicating the colors that belong to the key color range. The table does not keep track of the number of times that each of these colors occurs in the background. Therefore, the table does not identify a predominant

-2-

S.N. 09/924,926

background color. Henderson offers no other means identifying those background colors that occur most often. Henderson offers no reason, incentive or motivation to identify those background colors that occur most often.

The final office action alleges that predominant color identification is illustrated in Figure 9 and described in a passage at column 2, lines 12-35. The citation appears to be incorrect, since the cited passage doesn't describe Figure 9. The passage merely describes problems in segmenting an object from a backdrop. Figure 9 is described from col. 9, line 55 to column 10, line 12. According to Henderson's description of Figure 9, a key color volume is defined and then enlarged to account for shadows. The description of Figure 9 does not teach or suggest identifying the colors that occur most often. The description of Figure 9 does not teach or suggest reducing the error in mislabeling a color as a predominant color.

**b. Henderson does not teach or suggest testing specific colors among the randomly selected pixels to reduce the probability of at least one of a false-positive outcome and a false-negative outcome.** The final office action alleges that the probability of reducing a false detection of a predominant color is described at column 4, line 52, column 6, line 61, column 7, line 19, and column 2, lines 41-51. Henderson does not support this allegation. These cited passages concern mislabeling a background color as a foreground color. These passages do not concern the identification of the colors that occur most often in a digital image. Henderson attempts to reduce the error of classifying a foreground color as a background color (col. 2, lines 42-48). [1]

Golin does not teach or suggest identifying at least one predominant color in a digital image by testing specific colors in the digital image. This is

---

[1] Thus, Henderson's false positive refers to mistakenly classifying a color in the foreground region as a background color, not mistakenly classifying a color as a predominant color (as the office action alleges with respect to claims 3 and 15)

-3-

S.N. 09/924,926

acknowledged on p.2, line 5 of the advisory action. Golin is cited for the teaching that image compression techniques use randomly selected pixels.

### The final office action presents no motivation in the prior art for modifying the teachings of Henderson in view of Golin

The final office action states that cost reduction and development provide motivation for combining Golin and Henderson. However, neither Henderson nor Golin provides those reasons. Moreover, the final office action infers motivation because the two documents are related. See MPEP 2143.01 (fact that references can be combined or modified is not sufficient to establish *prima facie* obviousness).

### The final office action contains legal errors

a. **The final office action ignores claim limitations.** The final office action ignores the following limitation in claim 1: "to reduce the probability of at least one of a false-positive outcome and a false-negative outcome." On page 4, lines 15-17 of the final office action, the examiner states that this feature is given no patentable weight since it merely recites an "intended result."[2] However, there is no legal basis for ignoring a feature in the claim body. This feature limits the type of test that is conducted on specific pixels. It describes the type of test that is performed.

Based on a comment in the advisory action, the examiner also appears to ignore the term "predominant." At the beginning of the last full paragraph on page 2, the advisory action states "the nature of the problem to be solved is "identifying colors in a digital image." However, this is not the nature of the problem. The nature of the problem is identifying at least one **PREDOMINANT** color in a digital image. Claim 1 addresses this problem. Henderson does not.

---

[2] A result? A result of what?

-4-

S.N. 09/924,926

The final office action states that claims 6-10 and 18-22 merely recite the creation of a color list. However, claims 7-10 and 19-22 do not "merely" recite creating a color list. These claims recite a set of steps that minimize the number of pixels that are tested. The documents made of record do not teach or suggest such creation of a color list. For this additional reason, claims 6-10 and 18-22 should be allowed over the documents made of record.

**b. The final office action inserts claim limitations that are not recited.** Claim 1 does not recite a color list. A color list is recited in claims 6-8 and 18-22.

**c. The final office action "interprets" the prior art (Henderson).** On page 4, lines 1-3, the final office action states "The examiner has interpreted Henderson's process for characterization of the distribution of key color values to be functionally equivalent to a 'detection rule.'" However, the prior art is not supposed to be "interpreted." Claims are interpreted. With respect to claim 1, the examiner is supposed to interpret the feature "testing specific colors among the randomly selected pixels to reduce the probability of at least one of a false-positive outcome and a false-negative outcome" and then determine whether this feature could reasonably cover Henderson's method of determining a key color range. This determination has not yet been made.

## Conclusion

The rejection of claim 1 is based on a clear error in facts, a lack of motivation in prior art to modify the teachings of Henderson, and incorrect legal analysis. Alone or in combination, Henderson and Golin do not teach or suggest a method having all of the limitations of claim 1. Therefore, claim 1 and its dependent claims 2-12 should be allowed over the combination of Henderson and Golin. The remaining claims 13-23 should be allowed for the same reasons.

-5-